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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,336	11/29/2001	Yakov Kamen	007287.00019	4993
22907	7590	11/27/2007	EXAMINER	
BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			VAN HANDEL, MICHAEL P	
			ART UNIT	PAPER NUMBER
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			11/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/997,336	KAMEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael Van Handel	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 19 September 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-9,11-17 and 19-28 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3-9,11-17 and 19-28 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

1. This action is responsive to an Amendment filed 9/19/2007. Claims **1, 3-9, 11-17**, and **19-28** are pending. Claims **1, 3-6, 9, 11-14, 17, 19**, and **20** are amended. Claims **2, 10**, and **18** are canceled. Claims **21-28** are new. The examiner hereby withdraws the rejection of claims **1, 3-9, 11-17, 19**, and **20** under 35 USC 112, first paragraph in light of the amendment.

### *Response to Arguments*

1. Applicant's arguments regarding claims **1, 9**, and **17**, filed 9/19/2007, have been fully considered, but they are not persuasive.

Regarding claims **1, 9**, and **17**, the applicant argues that Davis et al. fails to disclose determining at least two meaningful words in a program title and determining a less descriptive word from the at least two meaningful words based on a frequency that each of the at least two meaningful words appear in a database. The examiner respectfully disagrees. As noted in the Office Action mailed 3/21/2007, Davis et al. discloses an interactive computer program used to edit program listings data (col. 17, l. 44-46). A data processor determines how much space is required to display a title based on its character length (col. 18, l. 1-3). If the data processor determines that a full title requires too much space to fit into one or more grid cells and if the title has not been previously edited, the title is presented to an editor using a display device connected to the data processor. The editor is then queried to alter the title, so that it will fit in the allotted space (col. 18, l. 12-21). Figure 11a clearly illustrates that the editor found the words

“BEST,” “SHOW,” and “TODAY,” as being meaningful for display, but in reduced 60 and 30 minute grid slots found the words “BEST” and “SHOW” as being more meaningful than the word “TODAY.” The edits are then stored in a library of shortened titles (col. 18, l. 35-43; col. 19, l. 38-43; & Figs. 10A, 11a, 11b). The examiner interprets this as “determining at least two meaningful words in a program title of an electronic program guide,” as currently claimed. Davis et al. further discloses that the next time the program title needs to be shortened, the data processor will edit it automatically based on the shortened title in the database (col. 18, l. 35-45). A word that appears in the shortened title has a greater frequency than one that does not, and will thus be used in the edited version. As such, the examiner interprets this as “determining a less descriptive word from the at least two meaningful words based on a frequency that each of the at least two meaningful words appear in a database,” as currently claimed.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9, 17, 21-23, 25, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis et al.

Referring to claims 1 and 9, Davis et al. discloses a machine-readable medium/method comprising:

- determining at least two meaningful words in a program title of an electronic program guide (if a title has not been previously edited and the title is too long for its grid size, an editor edits the title to fit the grid. Figure 11a clearly illustrates that the editor found the words "BEST," "SHOW," and "TODAY," as being meaningful for display, but in reduced 60 and 30 minute grid slots found the words "BEST" and "SHOW" as being more meaningful than the word "TODAY." The edits are then stored in a library of shortened titles)(col. 18, l. 12-21, 35-43; col. 19, l. 38-43; & Figs. 10A, 11a, 11b);
- determining a less descriptive word from the at least two meaningful words based on a frequency that each of the at least two meaningful words appear in a database (the next time the program title needs to be edited, the data processor will edit it automatically based on the shortened title in the database. A word that appears in the shortened title has a greater frequency than one that does not, and will thus be used in the edited version)(col. 18, l. 35-45);
- selectively removing the less descriptive word from the program title to create an abbreviated program title (col. 18, l. 35-45); and
- displaying the abbreviated program title in a program title field of the electronic program guide (Figs. 5a-5c, 7a-7c, & 11a).

Referring to claim 17, Davis et al. discloses an apparatus comprising:

- a memory 115 (col. 17, l. 49-50 & Fig. 1);
- a processor configured to, upon execution of one or more computer readable instructions stored in the memory, perform a method comprising:

- (a) determining at least two meaningful words in a program title (if a title has not been previously edited and the title is too long for its grid size, an editor edits the title to fit the grid. Figure 11a clearly illustrates that the editor found the words “BEST,” “SHOW,” and “TODAY,” as being meaningful for display, but in reduced 60 and 30 minute grid slots found the words “BEST” and “SHOW” as being more meaningful than the word “TODAY”)(col. 18, l. 12-21; col. 19, l. 38-43; & Figs. 10A, 11a, 11b);
- (b) determining a less descriptive word from the at least two meaningful words based on a frequency that each of the two meaningful words appear in a database (the next time the program title needs to be edited, the data processor will edit it automatically based on the shortened title in the database. A word that appears in the shortened title has a greater frequency than one that does not, and will thus be used in the edited version)(col. 18, l. 35-45); and
- (c) selectively removing the less descriptive word from the program title to create an abbreviated program title (col. 18, l. 35-45); and
- a display device configured to display the abbreviated program title in a program title field of an onscreen program guide (Figs. 5a-5c, 7a-7c, & 11a).
- Referring to claims 21-23, Davis et al. discloses the method/machine-readable medium/apparatus of claims 1, 9, and 17, respectively, wherein in addition to removing the less descriptive word, the method further includes:
- parsing the text of the program title (col. 17, l. 48-50, 60-67; col. 18, l. 1-3, 13-21; & Figs. 10A, 11a);

- determining at least one nonessential, nonrelational word of the program title (col. 18, l. 12-21; col. 19, l. 38-43; & Figs. 10A, 11a); and
- removing the nonessential, nonrelational word from the program title (Figs. 10A & 11a).

Referring to claim **25**, Davis et al. discloses the apparatus of claim 17, wherein the apparatus is a head end (Fig. 1).

Referring to claim **28**, Davis et al. discloses the method of claim 1, wherein the database includes a database of program titles (col. 18, l. 35-43).

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **3-5, 8, 11-13, 16, 19-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. in view of Kudrolli et al.

Referring to claims **3, 11, and 19**, Davis et al. discloses the methods/apparatus of claims 1, 9, and 17, respectively. Davis et al. does not disclose:

- determining at least one relational word of the program title; and
- replacing the at least one relational word with a representative character.

Kudrolli et al. discloses replacing the word “and” with the character “&” in order to cope with display space constraints in computer software (Fig. 20). It would have been obvious to one of

ordinary skill in the art at the time that the invention was made to modify Davis et al. to include replacing the word “and” with the character “&,” such as that taught by Kudrolli et al. in order to make program guides more useful for a viewer and more pleasant to watch (Davis et al. col. 2, l. 38-41).

Referring to claims **4, 12, and 20**, the combination of Davis et al. and Kudrolli et al. teaches:

- determining at least one essential word of a program title;
- determining the number of characters necessary to display the at least one essential word; and
- abbreviating the at least one essential word if the number of characters necessary to display the at least one essential word is greater than the specified number of characters (Kudrolli et al. col. 7, l. 48-55).

Referring to claims **5 and 13**, the combination of Davis et al. and Kudrolli et al. teaches:

- determining a plurality of essential words of the program title;
- determining the number of characters necessary to display the plurality of essential words; and
- removing an essential word if the number of characters necessary to display the plurality of essential words is greater than the specified number of characters (the examiner notes that the title word will be deleted only if the prior four steps are exhausted (Kudrolli et al. col. 7, l. 61).

Referring to claims **8** and **16**, the combination of Davis et al. and Kudrolli et al. teaches that an essential word occurring most frequently in a database is removed (Kudrolli et al. col. 7, l. 40-47).

5. Claims **6**, **14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. in view of Knauft et al.

Referring to claims **6** and **14**, Davis et al. discloses the method/machine-readable medium of claims 21 and 22, respectively. Davis et al. does not disclose that the at least one nonessential, nonrelational word comprises all of the words selected from the group consisting of adverbs, adjectives, prepositions, and articles. Knauft et al. discloses an electronic document retrieval system that removes adjectives or adverbs from the document prior to presenting the document to an information retrieval (IR) engine. It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Davis et al. to include removing adjectives or adverbs from an electronic document prior to its presentation such as that taught by Knauft et al. in order to provide information to a system that is almost as usable as the original (col. 2, l. 31-33).

NOTE: The USPTO considers the applicant's "selected from the group consisting of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

6. Claims **7**, **15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. in view of Kudrolli et al. and further in view of Hejna, Jr.

Referring to claims 7 and 15, the combination of Davis et al. and Kudrolli et al. teaches the methods of claims 4 and 12, respectively. The combination of Davis et al. and Kudrolli et al. does not teach that the at least one essential word comprises all of the words selected from the group consisting of subject, object nouns, and verbs. Hejna, Jr. discloses removing articles and adjectives from conceptual information contained within TV broadcasts to provide output comprised only of nouns and noun phrases (col. 14, l. 16-19 & col. 16, l. 46-51). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the combination of Davis et al. and Kudrolli et al. to include providing output comprised only of nouns and noun phrases such as that taught by Hejna, Jr. in order to make a program guide more useful to a viewer and more pleasant to watch (Davis et al. col. 2, l. 38-41).

NOTE: The USPTO considers the applicant's "selected from the group consisting of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

7. Claims 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. in view of Wehmeyer.

Referring to claim 24, Davis et al. discloses the apparatus of claim 17. Davis et al. further discloses that the program listings data are edited through the use of a processor executing a text fit interactive computer program (col. 17, l. 44-46). Davis et al. also discloses that program listings can be listed in an interactive program guide implemented on a cable converter box, the converter box containing processor and memory capabilities (col. 20, l. 1-4). The program schedule information is downloaded and stored in the converter box memory and can be controlled locally (col. 20, l. 18-21, 24-26). Davis et al. does not disclose that the text fit

system is implemented on a set-top box. Wehmeyer discloses an interface for locally customizing program guide information containing program descriptions (see Abstract) in a cable converter box (col. 10, l. 51-62). Generic program guide information, including program identifiers, is received and stored in the cable converter box (col. 11, l. 11-22). The user may edit text in a cell of the electronic program guide (EPG) by highlighting a cell, selecting an edit text mode key, and entering the desired text. For example, the user may change the text "THE GOLDEN ERA" to "THE ERA" (col. 16, l. 50-64 & Fig. 8). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the text fit system of Davis et al. to be implemented on the cable converter box, rather than the head end, such as that taught by Wehmeyer in order to provide users with ways to customize the program guide list (Wehmeyer col. 2, l. 13-15).

Referring to claims 26 and 27, the combination of Davis et al. and Wehmeyer teaches the apparatus of claim 24, wherein a satellite transmits a signal to a satellite dish connected to the set-top box (col. 5, l. 26-28), which is connected to a television, and wherein the television is the display device (col. 21, l. 4-8 & Fig. 12).

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571-272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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